

COE 205, Term 022

Computer Organization & Assembly Programming

Programming Assignment# 2 Due Date: Sunday April 13, 2003

- Q.1.** Write an assembly program that does the following:
- (i) Ask the user to enter a single digit N (0-9).
 - (ii) Ask the user to enter a two-dimensional array of NxN digits. Elements of a single row should be separated by one or more spaces and each row is read in a new line. The characters entered should be in the digits 0-9. If any other character is entered an error message should be printed and the array is read again.
 - (iii) Ask the user to select a row or a column. Then print the selected row or column. Also, print the maximum and the minimum in the selected row or column.

A sample execution of the program is shown below:

```
Enter a single-digit (0-9): 3
Enter the array:
1 2 3
4 5 6
7 8 9
Enter your choice (0-row 1-column 2-stop the program): 1
Enter the column number: 1
Column 1 is: 2 5 8
Maximum is 8
Minimum is 2
Enter your choice (0-row 1-column 2-stop the program): 0
Enter the row number: 2
Row 2 is: 7 8 9
Maximum is 9
Minimum is 7
Enter your choice (0-row 1-column 2-stop the program): 2
```

Include both a hard and soft copy of your program in an envelope that contains your name and ID. The solution should be well organized and your program should be well documented. The soft copy should be submitted in a floppy including a Readme file indicating the file names containing the solution and whether it works or not. The Readme file should also contain your name and ID.